

Amendments to the Claims

1. (Currently amended) A composition comprising human feeder cells and an isolated non-murine [An isolated non-mouse mammalian] pluripotential embryonic stem cell which can:
 - (a) be maintained on feeder layers for at least 20 passages; and
 - (b) give rise to embryoid bodies and multiple differentiated cell phenotypes in monolayer culture.
2. (Original) The embryonic stem cell of claim 1, having a mutation which renders a gene non-functional.
3. (Original) The embryonic stem cell of claim 1, having an insertion of a functional gene.
4. (Currently amended) [[An]]A composition comprising human feeder cells and an isolated human pluripotential embryonic stem cell which can:
 - (a) be maintained on feeder layers for at least 20 passages; and
 - (b) give rise to embryoid bodies and multiple differentiated cell phenotypes in monolayer culture.
5. (Currently amended) A composition comprising:
 - (a) mammalian pluripotential embryonic stem cells; [[and]]
 - (b) a fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor, and soluble steel factor in amounts to enhance the growth and allow the continued proliferation of the cell; and
 - (c) human feeder cells.
6. (Original) The method of claim 5, wherein the fibroblast growth factor is basic fibroblast growth factor.
7. (Currently amended) A composition comprising:
 - (a) human pluripotential embryonic stem cells; [[and]]

(b) a fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor, and soluble steel factor in amounts to enhance the growth and allow the continued proliferation of the cell; and

(c) human feeder cells.

8. (Currently amended) A composition comprising:

(a) mammalian primordial germ cells; [[and]]

(b) a fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor and soluble steel factor in amounts to enhance the growth and allow the continued proliferation of the cells and the formation of pluripotent embryonic stem cells from the primordial germ cell; and

(c) human feeder cells.

9. (Original) The composition of claim 8, wherein the fibroblast growth factor is basic fibroblast growth factor.

10. (Currently amended) A composition comprising:

(a) embryonic ectoderm cells; [[and]]

(b) fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor and soluble steel factor in amounts to enhance the growth and allow the continued proliferation of the cells and the formation of pluripotent embryonic stem cells from the embryonic ectoderm cells; and

(c) human feeder cells.

11. (Currently amended) A composition comprising:

(a) germ cells; [[and]]

(b) fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor and soluble steel factor in amounts to enhance the growth and allow the continued proliferation of the cells and the formation of pluripotent embryonic stem cells from the germ cells; and

(c) human feeder cells.

12. (Original) The composition of claim 11, wherein the fibroblast growth factor is basic fibroblast growth factor.

13. (Currently amended) A composition comprising a fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor, and soluble steel factor in amounts to enhance the growth and allow the continued proliferation of primordial germ cells and the formation of pluripotent embryonic stem cells from he primordial germ cells, and human feeder cells.

14. (Original) The composition of claim 13; wherein the fibroblast growth factor is basic fibroblast growth factor.

15. (Currently amended) A method of making a mammalian pluripotential embryonic stem cell comprising culturing a primordial germ cell in a composition comprising a growth enhancing amount of basic fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor, [[and]] soluble steel factor, and human feeder cells, thereby making a pluripotential embryonic stem cell from a primordial germ cell.

16. (Original) The method of claim 15 wherein the primordial germ cell is derived from a human.

17. (Original) The method of claim 15, wherein the primordial germ cell is derived from a mouse.

18. (Original) A pluripotential embryonic stem cell produced by the method of claim 15.

19. (Original) A human pluripotential embryonic stem cell produced by the method of claim 16.

20. (Currently amended) A method of making a mammalian pluripotential embryonic stem cell comprising culturing an embryonic ectoderm cell in a composition comprising a growth enhancing amount of basic fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor, [[and]] soluble steel factor, and human feeder cells, thereby making a pluripotential embryonic stem cell from an embryonic ectoderm cell.

ATTORNEY DOCKET NO. 16016.0005U2
PATENT

21. (Original) The method of claim 20, wherein the embryonic ectoderm cell is derived from a human.

22. (Original) The method of claim 20, wherein the embryonic ectoderm cell is derived from a mouse.

23. (Original) A pluripotential embryonic stem cell produced by the method of claim 20.

24. (Original) A human pluripotential embryonic stem cell produced by the method of claim 21.

25. (Currently amended) A method of making a mammalian pluripotential embryonic stem cell comprising culturing a germ cell in a composition comprising a growth enhancing amount of basic fibroblast growth factor, leukemia inhibitory factor, membrane associated steel factor, [[and]] soluble steel factor, and human feeder cells, thereby making a pluripotential embryonic stem cell from a germ cell.

26. (Original) The method of claim 25, wherein the germ cell is derived from a human.

27. (Original) A pluripotential embryonic stem cell produced by the method of claim 25.

28. (Original) A pluripotential embryonic stem cell produced by the method of claim 26.

Claims 29-32 (Canceled).

33. (Original) A method of obtaining a cell for therapy comprising deriving a cell from the pluripotential embryonic stem cell of claim 1 and determine whether the derivative cell can be utilized for therapy.

34. (Original) A method of obtaining a cell for therapy comprising deriving a cell from the pluripotential embryonic stem cell of claim 4 and determining whether the derivative cell can be utilized for therapy.

35. (Original) A method of screening a factor for the ability to derive a cell from the pluripotential embryonic stem cell comprising adding the factor to the pluripotential embryonic stem cell of claim 1 and determining whether a derivative cell is formed.

36. (Original) A method of screening a factor for the ability to derive a cell from the pluripotent embryonic stem cell comprising adding the factor to the pluripotent embryonic stem cell of claim 4 and determining whether a derivative cell is formed.

37. (New) The composition of claim 1, wherein the embryonic stem cell has a normal karyotype.

38. (New) The composition of claim 4, wherein the embryonic stem cell has a normal karyotype.

39. (New) The composition of claim 5, wherein the embryonic stem cell has a normal karyotype.

40. (New) The composition of claim 7, wherein the embryonic stem cell has a normal karyotype.

41. (New) The composition of claim 8, wherein the embryonic stem cell has a normal karyotype.

42. (New) The composition of claim 10, wherein the embryonic stem cell has a normal karyotype.

43. (New) The composition of claim 13, wherein the embryonic stem cell has a normal karyotype.

44. (New) A method of obtaining a cell for therapy comprising deriving a cell from the pluripotent embryonic stem cell of claim 4.

45. (New) The composition of claim 1, wherein the human feeder cell is a cell line.

46. (New) The composition of claim 4, wherein the human feeder cell is a cell line.

47. (New) The composition of claim 5, wherein the human feeder cell is a cell line.

48. (New) The composition of claim 7, wherein the human feeder cell is a cell line.

49. (New) The composition of claim 8, wherein the human feeder cell is a cell line.

50. (New) The composition of claim 10, wherein the human feeder cell is a cell line.

51. (New) The composition of claim 13, wherein the human feeder cell is a cell line.

52. (New) The method of claim 15, wherein the human feeder cell is a cell line.

ATTORNEY DOCKET NO. 16016.0005U2
PATENT

- 53. (New) The method of claim 20, wherein the human feeder cell is a cell line.
- 54. (New) The method of claim 25, wherein the human feeder cell is a cell line.